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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/594,079	09/25/2006	Kenji Imanishi	038921.58289US	8813

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EXAMINER
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MEROUAN, ABDERRAHIM

ART UNIT	PAPER NUMBER
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2628

MAIL DATE	DELIVERY MODE
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02/03/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/594,079	<b>Applicant(s)</b> IMANISHI, KENJI	
	<b>Examiner</b> ABDERRAHIM MEROUAN	<b>Art Unit</b> 2628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 25 September 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 September 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 01/12/2008 has been entered.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-4, are rejected under 35 U.S.C. 103(a) as being unpatentable over Ujiie (U.S. Patent 6748346 B2) hereinafter Ujiie in view of Sato et al (U.S Patent 6766207 B2) hereinafter referred as Sato, and

4. As per claim 1, Ujiie discloses: A two-dimensional drawings creation method of creating two-dimensional drawings based on a three-dimensional model by using a computer source including (Ujiie, Column 5, lines 54-64), a processing device source, ( Ujiie, Column 10 , lines 39 -41), a memory source, ( Ujiie, Column 10 , line 41 ), an input device, ( Ujiie, Column 10, line 41 ), and an interface, ( Ujiie, Column 10, line 59 ), in which the processing device source executes the method, (Ujiie, Column 10, lines 47 -49) comprising : holding, three-dimensional information on the shape before assembling and the shape after assembling of the shape changing element and the shape of the common elements, ( Ujiie, Column 3, lines 33-42 ), setting a restriction condition between the shape before assembling of the shape changing element and the shape of the common element to become a single part to each other, ( Ujiie, Column 3, lines 63-67 ), setting a restriction condition between the shape after assembling of the shape changing element and the shape of the common elements to become a single part to each other, ( Ujiie, Column 3, lines 54-62 ), and developing the held three-dimensional information into the two-dimensional drawing (Ujiie, Column 4, lines 50-56, and Column 6, lines 11-22), in accordance with each of the restriction conditions, based on the operation program of the memory source. (Ujiie, Column 11, lines 1-6).

Ujii doesn't disclose: in three-dimensional shape information of a parts model that is formed of one body that has a shape changing element in part of the body whose shape becomes different shapes between before and after assembling and other common elements, whose shapes do not become different shapes between before and after assembling. However, Sato discloses: holding in three-dimensional shape information of a parts model that is formed of one body that has a shape changing element in part of the body whose shape becomes different shapes between

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before and after assembling (Sato, Column 7, lines 8-24), and other common elements, whose shapes do not become different shapes between before and after assembling. (Sato, Figure 10A and Figure 10B, Block 402)

It would have been obvious to one skilled in the art, at the time of the Applicant's invention, to incorporate the teachings of Sato into the process taught by Ujiie, because through such incorporation would provide a detailed shape changing between before and after assembling.

5. As per claim 2, Ujiie discloses: The two-dimensional drawing creation method: wherein the method includes judging the parts model as to whether it is before or after assembling, ( Ujiie, Column 4, lines 63-67, and Column 5, lines 1-3 ) and not displaying the shape after assembling of the shape changing element, while displaying the shape before assembling of the shape changing element and the shape of the common elements before assembling, (Ujiie, Column 5, lines 4-10) and not displaying the shape before assembling of the shape changing element while displaying the shape after assembling of the shape changing elements and the shape of the common element after assembling. (Ujiie, Column 7, lines 1-6)

6. As per claim 3, Ujiie discloses: A three-dimensional CAD system comprising: a data base that holds, three-dimensional information on the shape before assembling and the shape after the assembling of the shape changing element and the shape of the common elements, ( Ujiie, Column 3, lines 33-42 ) and a calculation unit that sets a restriction condition between the shape changing element before assembling and the shape of the common elements to become a single part to each other, ( Ujiie, Column 3, lines 63-67 ) sets a restriction condition between the

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shape after assembling of the shape changing element and the shape of the common elements to become a single part to each other, ( Ujiie, Column 3, lines 54-62 ) and develops the three-dimensional shape information held in the data base into a two-dimensional drawing( Ujiie, Column 4, lines 50-56 ) in accordance with each of the restriction conditions. ( Ujiie, Column 3, lines 63-67 , and Column 3, lines 54-62)

Ujii doesn't disclose: three-dimensional shape information of a parts model that is formed of one body that has a shape changing element in part of the body whose shape becomes different shapes between before and after assembling and other common elements, whose shapes do not become different shapes between before and after assembling. However, Sato discloses: holding in three-dimensional shape information of a parts model that is formed of one body that has a shape changing element in part of the body whose shape becomes different shapes between before and after assembling (Sato, Column 7, lines 8-24), and other common elements, whose shapes do not become different shapes between before and after assembling. (Sato, Figure 10A and Figure 10B, Block 402)

It would have been obvious to one skilled in the art, at the time of the Applicant's invention, to incorporate the teachings of Sato into the process taught by Ujiie, because through such incorporation would provide a detailed shape changing between before and after assembling.

6. As per claim 4, Ujiie discloses: The three-dimensional CAD system further comprising: a display unit for displaying the two-dimensional drawing on a screen, ( Ujiie, Column 10, lines 57-65) in which the calculation unit judges for the parts model as to whether it is before or after

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assembling, ( Ujiie, Column 4, lines 63-67, and Column 5, lines 1-3) does not display the shape after assembling of the shape changing elements while displaying the shape before assembling of the shape changing elements and the shape after assembling of the common elements on the display screen before assembling (Ujiie, Column 5, lines 4-10) and does not display the shape before assembling of the shape changing element while displaying the shape after assembling of the shape changing elements and the shape of the common elements on the display screen after assembling. (Ujiie, Column 7, lines 1-6)

### *Response to Arguments*

7. Applicant's arguments with respect to claims 1-4 have been considered but are moot.

8. Applicant's arguments directed to claims 1-4 have been fully considered but they are not persuasive.

9. In response to applicants argument for claim 1, applicant argues that the prior art doesn't disclose: "three-dimensional shape information of a parts model that is formed of one body that has a shape changing element in part of the body whose shape becomes different shapes between before and after assembling and other common elements, whose shapes do not become different shapes between before and after assembling". This argument is not persuasive after using the combination of two prior arts by incorporating the teaching of Sato into the process taught by Ujiie. Sato stated that: "FIGS. 11A and 11B respectively are side views for explaining

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an interference check when creating the three-dimensional model after the assembly using a deformed soft part 400A after the assembly. FIG. 11A shows a state of the soft part 400 before the assembly, and FIG. 11B shows a state of the deformed soft part 400A after the assembly. In this embodiment, the table described above is used to automatically obtain the structural dimensions of the deformed soft part 400A after the assembly from the structural dimensions of the soft part 400 before the assembly. In this case, the assembling conditions which are input in the step S5 include the distance in the z-axis direction between the hard parts 401 and 402 after the assembly. Accordingly, the deformed soft part 400A has the shape and structural dimensions of the soft part 400 for the case where the parts 400, 401, 402 and 403 are actually assembled, to thereby enable an accurate interference check to be carried out.” (see: Sato, Column 7, lines 8-24),

Also the figure (Sato, Figure 10A and Figure 10B, Block 402) shows the common part (Block 402) did not change or deformed before and after the assembling.

### ***Conclusion***

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ABDERRAHIM MEROUAN whose telephone number is (571)270-5254. The examiner can normally be reached on Monday to Friday 7:30 AM to 5:00 PM.



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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Xiao Wu can be reached on (571) 272-7761. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Abderrahim Merouan/

Examiner, Art Unit 2628

/XIAO M. WU/

Supervisory Patent Examiner, Art Unit 2628